AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (previously presented): A network connection apparatus, comprising:

a computer-readable medium storing a computer program, which when executed by a computer processor, comprises a join module for connecting a second network, to which the join module belongs, with a first network in response to an inter-network connection request message transmitted from the first network, setting a security level of the first network to a set security level, and controlling network command messages in response to the set security level;

a connection module for receiving the inter-network connection request message transmitted from the first network and connecting the first network with the second network;

an authentication/security module for determining whether to allow a connection of the first network that has transmitted the inter-network connection request message to the connection module, and setting and checking the security level of the first network; and

a transmission module for transmitting a requested network command message requested by the first network when the connection is allowed by the authentication/security module;

wherein the security level is applied differently depending on the first network to be connected.

2. (canceled).

3. (previously presented): The apparatus as claimed in claim 1, wherein the computer program stored on the computer-readable medium further comprises: a management module for collecting and managing information about devices present in the second network by performing a discovery process for the devices; and

a component module for generating a component representing services of the devices present in the second network on a basis of the information about the devices collected by the management module.

4. (previously presented): The apparatus as claimed in claim 3, wherein the computer program stored on the computer-readable medium further comprises:

a stack module for transmitting a control message to the devices present in the second network; and

a lookup service module for storing information about the component generated by the component module in a lookup table, and searching for component information of a specific device upon a request for a service of the specific device.

5. (previously presented): The apparatus as claimed in claim 1, wherein the connection module contains connection information about the first network or the devices present in the first network.

6. (previously presented): The apparatus as claimed in claim 1, wherein the connection module checks periodically whether the first network transmits a transmitted network command message every predetermined period of time, and terminates the connection if the transmitted network command message is not received within the predetermined period of time.

7. (canceled).

8. (previously presented): The apparatus as claimed in claim 1, wherein the transmission module transmits the network command messages transmitted and received between the first network and the second network to which the join module belongs.

9. (currently amended): A method for connecting separate networks, comprising:

(a) transmitting an initial inter-network connection request message to a second network by a first network;

(b) analyzing the initial inter-network connection request message and setting a security level of the first network to a set security level by the second network;

(c) transmitting a network command message to the second network by the first network;

(d) ~~searching~~checking, by the second network, the set security level of the first network which has transmitted the network command message ~~to generate a searched security level~~; and

(e) transmitting the ~~searched~~ checked security level and the network command message to the second network;

wherein the security level is applied differently depending on the first network to be connected; and

wherein (b) comprises analyzing the initial inter-network connection request message and determining whether to allow a connection between the first and the second networks.

10. (original): The method as claimed in claim 9, wherein the initial inter-network connection request message includes information about the first network that has transmitted the initial inter-network connection request message.

11. (canceled).

12. (canceled).

13. (original): The method as claimed in claim 9, wherein (e) comprises transmitting a notify message to the first network.

14. (original): The method as claimed in claim 9, further comprising:

transmitting a response message for the network command message by the second network; and

checking a security level for the response message of the second network.

15. (currently amended): The method as claimed in claim 9, further comprising, if the network command message is a search message for looking for a device present in the second network, searching for devices corresponding to the ~~searched~~ checked security level of the first network and transmitting information about the devices.

16. (original): The method as claimed in claim 9, further comprising, if the network command message is a message for requesting information about a specific device present in the second network, searching component information about the specific device among component information about the devices present in the second network and transmitting the component information about the specific device.

17. (original): The method according to claim 9, further comprising, if the network command message is not received from the first network within a predetermined period of time, terminating a connection between the first and the second networks.

18. (currently amended): A method for connecting separate networks, comprising:

(a) receiving an initial inter-network connection request message from an external network;

(b) analyzing the initial inter-network connection request message and setting a security level of the external network to a set security level;

(c) receiving a network command message from the external network;

(d) ~~searching~~ checking the set security level of the external network which has transmitted the network command message ~~to generate a searched security level~~; and

(e) transmitting the ~~searched~~ checked security level and the network command message to another network to which the external network is connected;

wherein the security level is applied differently depending on the external network to be connected; and

wherein (b) comprises analyzing the initial inter-network connection request message and determining whether to allow a connection between the external and the another networks.

19. (original): The method as claimed in claim 18, wherein the initial inter-network connection request message includes information about the external network that has transmitted the initial inter-network connection request message.

20. (canceled).

21. (canceled).

22. (original): The method as claimed in claim 18, wherein (e) comprises transmitting a notify message to the another network.

23. (original): The method as claimed in claim 18, further comprising:

transmitting a response message for the network command message to the external network; and

checking a security level for the response message.

24. (currently amended): The method as claimed in claim 18, comprising, if the network command message is a search message for a device present in the another network, searching for devices corresponding to the ~~searched~~ checked security level of the external network and transmitting information about the devices.

25. (original): The method as claimed in claim 18, further comprising, if the network command message is a message for requesting information about a specific device present in the another network, searching for component information about the specific device and transmitting the component information about the specific device.

26. (original): The method as claimed in claim 18, further comprising, if the network command message is not received from the external network within a predetermined period of time, terminating a connection between the external and the another networks.